UK NATIONAL ARCHIVES: CAB 158/51

JIC(68) 4 (Final)

22nd January, 1968.

EMPLOYMENT OF SOVIET FORCES IN THE EVENT OF GENERAL WAR UP TO THE END OF 1972

Report by the Joint Intelligence Committee

INTRODUCTION

The likelihood of war with the Soviet Union and the ways by which it might come about are examined in our reports JIC(65) 87 (Final) and JIC(66) 77 (Revised Final) in which we concluded that "the Soviet leaders will not deliberately start a general war and are most unlikely deliberately to start a limited war". We also concluded that war between the Soviet Union and the West could result from miscalculation, but that this was unlikely. Notwithstanding these assessments there is a requirement to provide views on how the Soviet armed forces might be employed in the event of general war.

2. In examining this problem we assume that a critical situation in some part of the world has given rise to a period of mounting tension between the Soviet Union and the West; and that as a result of a process of miscalculation the Soviet Union decides on all-out war, including a full-scale strategic nuclear attack. Probable plans for the employment of Soviet armed forces in this latter circumstance are discussed below.

3. We believe that the overriding Soviet aim in general war would be to limit damage to the Soviet Union to the greatest extent possible. With this in mind, their military objectives are likely to be -

(a) Primary Objective
To destroy as much as possible of the Western strategic offensive capability and the Western will to fight;

(b) Secondary Objective
To engage and defeat such other Western military forces as remained, in order subsequently to extract any possible advantage for the Soviet Union.

8. It would seem logical therefore for the Russians to conclude that, having covered those nuclear strike force and air defence targets which are susceptible to attack, the most profitable targets in the United States would be those related to the aim of destroying the will and ability of the government and people to continue the war. These would include centres of governmental and military control and concentrations of industry and population.

9. In Europe, all worthwhile targets in NATO countries, including the United Kingdom, can be covered by the large MRBM/IRBM and medium bomber forces located in Western Russia.

WEAPONS SYSTEMS

ICBMs

10. ICBMs would be used against targets in North America; they have the advantage of giving a shorter warning time than aircraft and are suitable for the engagement of static targets. In addition to the systems now being deployed, there are several development projects under way which could result in operational systems during the period. A Fractional Orbit Bombardment System (FOBS) has been undergoing regular research and development testing and may be deployed as an operational system. If so it would add to the diversity of Russia's strategic threat, reduce warning times and make target prediction more difficult. A solid propellant ICBM is also believed to be under development, and mobile ICBM concepts are being investigated by the Russians. If deployed the mobile systems would supplement systems in permanent sites; solid propellant ICBMs might be deployed in new sites or installed as replacement missiles at existing sites.

MRBM/IRBMs

11. MRBM/IRBMs have sufficient accuracy and warhead yield, together with short warning time, to be suitable for use against Western nuclear strike forces in Europe all of which are at present unhardened. They are also suitable for use against major cities, industrial targets and centres of control.

12. MRBMs would normally be launched from permanent sites. However, the Russians have constructed a large number of "field" type launch positions in the vicinity of permanent soft MRBM sites. These "field" sites are believed to have no permanent facilities but to consist of

STAND/ NO. 64

TOP SECRET ① ~~LHT~~ ② Hrd in FE

Office Memorandum • UNITED STATES GOVERNMENT

TO : FE - Mr. Rusk

FROM : FE - Mr. Emmerson

SUBJECT: Use of the Atomic Bomb in China

DATE: November 8, 1950

Bureau of
FAR EASTERN AFFAIRS
NOV 8 - 1950
ASSISTANT SECRETARY
Department of State

If we use the atomic bomb in China it should be done only on the basis of over-riding military considerations. We should presumably have reached a point where the bomb is needed to produce decisive results either unobtainable by conventional warfare or obtainable only through expenditure of vastly greater numbers of men and quantities of materiel.

We should of course defer to a JCS estimate of the military effect of atomic bombing in China. One opinion would seem to be that China offers few suitable A-bomb targets, in view of scattered cities, low degree of industrialization, and immense area. Targets would presumably be 1) cities, 2) industrial complexes, and 3) concentrations of men and materiel in particular tactical situations. Obviously, the political effects, summarized below, would vary in degree according to the target. A repetition of Hiroshima and Nagasaki would produce the most damaging reaction, bombing of ~~purely industrial targets~~ military formations the least. Nevertheless, we must consider that, regardless of the fact that military results achieved by atomic bombardment may be identical to those attained by convential weapons, the effect on world opinion will be vastly different. The A-bomb has the status of a peculiar monster conceived by American cunning and its use by us, in whatever situation, would be exploited to our serious detriment.

Therefore, if a decision to use the A-bomb in China should be reached, we should either:

1) Secure some form of sanction for its use from cooperating members of the UN, or

2) be prepared to accept the political damage in return for the strategic gain.

The following are foreseen as some of the political effects of a decision to use the atomic bomb in China:

1. The Effect on the United States Moral Position.

In view of the history of our attempts to secure international control of atomic energy and of the special place occupied by the atomic bomb as a weapon of mass destruction, the moral position of the United States would be seriously damaged as a result of use of the bomb, without international sanction, against China. Because of the difference in the moral, political, and psychological position occupied by China as opposed to that of the USSR, in the eyes of the world, the effect of using the A-bomb against China would be quite different from that of its use against the Soviet Union.

2. Effect on the UN of a US Decision to Use the A-Bomb.

Unilateral decision by the United States to use the atomic bomb against China would in all likelihood destroy the unity preserved thus far in the combined UN action in Korea. It is probable that U. S. use of the A-bomb would be deplored and denounced by a considerable number of nations who had up to that time supported the action in Korea. The results might therefore be a disintegration of the concept of UN maintenance of world security and a shattering blow to the future development of the UN in the direction indicated by the Uniting for Peace resolution.

3. Effect on the USSR.

Use of the atomic bomb in China would strengthen Soviet propaganda that the United States is bent on initiating general war. Furthermore, should the Soviet Union be prepared to launch a third World War, atomic bombing of China would encourage Soviet participation in war under conditions by which the U.S. moral position would be irreparably damaged while the Soviets would suffer the minimum condemnation.

4. The Effect in Asia.

Should the next atomic bomb be dropped on an Asiatic population, it is easy to foresee the revulsion of feeling which would spread throughout Asia. Fears that we reserve atomic weapons exclusively for Japanese and Chinese would be confirmed, our efforts to win the Asiatics to our side would be cancelled and our influence in non-Communist nations of Asia would deteriorate to an almost non-existent quantity.

5. Use of the A-Bomb Would Commit us Deeper in Asia.

In order to obtain decisive results we should undoubtedly have to engage in atomic warfare on a wide scale. This would involve us deep in Asia and make it difficult, if not impossible, to withdraw in order to fight in another theater of war. On the other hand, should we be unable to achieve decisive results even with atomic bombing of China, the effect upon our world position, particularly as regards Western Europe and countries looking to us for protection against the Soviets, would be disastrous.

FE:JKEmmerson:jam JKE

Befehl (ORDER)

des Militärkommandanten des sowjetischen Sektors von Berlin

(OF MILITARY COMMANDER, SOVIET SECTOR, BERLIN)

Betrifft: Erklärung des Ausnahmezustandes im sowjetischen Sektor von Berlin

(DECLARATION OF STATE OF EMERGENCY)

Für die Herbeiführung einer festen öffentlichen Ordnung im sowjetischen Sektor von Berlin wird befohlen:

1. **Ab 13.00 Uhr des 17. Juni 1953 wird im sowjetischen Sektor von Berlin der Ausnahmezustand verhängt.**
2. **Alle Demonstrationen, Versammlungen, Kundgebungen und sonstige Menschenansammlungen über 3 Personen werden auf Straßen und Plätzen wie auch in öffentlichen Gebäuden verboten.**
3. **Jeglicher Verkehr von Fußgängern und der Verkehr von Kraftfahrzeugen und Fahrzeugen wird von 9 Uhr abends bis 5 Uhr morgens verboten.**
4. **Diejenigen, die gegen diesen Befehl verstoßen, werden nach den Kriegsgesetzen bestraft.**

(1. STATE OF EMERGENCY FROM 1300, 17 JUNE 1953
2. NO DEMONSTRATIONS OF 3 PEOPLE IN PUBLIC
3. NO TRAFFIC + CURFEW FROM 9PM – 5AM)
4. WARTIME PUNISHMENTS FOR VIOLATORS

Militärkommandant des sowjetischen Sektors von Berlin

(MAJOR
-GENERAL) **Generalmajor**

DIBROWA

(BERLIN, 17 JUNE 1953)

Berlin, den 17. Juni 1953.

ORE 1

23 July 1946

COPY NO.________

CENTRAL INTELLIGENCE GROUP

SOVIET FOREIGN AND MILITARY POLICY

SUMMARY

1. The Soviet Government anticipates an inevitable conflict with the capitalist world. It therefore seeks to increase its relative power by building up its own strength and undermining that of its assumed antagonists.

ENCLOSURE "B"

SOVIET MILITARY POLICY

1. Soviet military policy derives from that preoccupation with security which is the basis of Soviet foreign policy. (See Enclosure "A", paragraphs 3 and 4a.) On the premise that the peaceful coexistence of Communist and capitalist states is in the long run impossible, and that the U.S.S.R. is in constant peril so long as it remains within a "capitalist encirclement," it is the policy of the Soviet Union to maintain armed forces capable of assuring its security and supporting its foreign policy against any possible combination of foreign powers. The result is an army by far the largest in the world (except the Chinese).

2. Even the populous Soviet Union, however, cannot afford an unlimited diversion of manpower from productive civil pursuits, especially in view of manpower requirements for reconstruction and for the new Five Year Plan. Consequently it has had to adopt a demobilization program which is a compromise between the supposed requirements of security and those of the economy. By September the strength of the armed forces will have been reduced from 12,500,000 to 4,500,000 men."* Further reduction is unlikely.

3. The probable geographical distribution of the total strength indicated will be 1,100,000 in occupied Europe, 650,000 in the Far East, and 2,750,000 in the remainder of the U.S.S.R. The composition will be 3,200,000 (71%) in the ground forces and rear services, 500,000 (11%) in the air forces, 300,000 (7%) in the naval forces, and 500,000 (11%) in the MVD (political security forces). The post-war reorganization includes unification of command in a single Ministry of the Armed Forces having jurisdiction over all forces except the MVD troops, which remain under the Ministry of Internal Affairs.

4. In addition to its own forces, the Soviet Union is assisting and participating in the reconstitution of the armed forces of its satellites in such manner as to insure its effective control of them. While in this its object is primarily political, such forces supplement its own as locally useful auxilliaries.

5. Soviet experience during the war was limited almost exclusively to the employment of large masses of ground troops spearheaded by mobile tank-artillery-infantry teams. Air power was employed chiefly for close ground support. Naval operations were insignificant. The Soviets had only limited experience in amphibious operations, almost none in airborne operations, and none with carrier-based air operations.

Soviet Premier Nikita Khrushchev's response to President Kennedy's 22 October 1962 TV broadcast imposing a stop-and-search shipping policy to prevent any further nuclear IRBM's with striking range of Washington DC from being shipped to Cuba. Khrushchev points out that Kennedy's policy is technically "illegal" in international law, and claims it is a threat to peace!

SECRET

DEPARTMENT OF STATE
DIVISION OF LANGUAGE SERVICES

(TRANSLATION)

LS NO. 45989
T-85/T-94
Russian

[Embossed Seal of the USSR]

Moscow, October 23, 1962

Mr. President:

I have just received your letter, and have also acquainted myself with the text of your speech of October 22 regarding Cuba.

I must say frankly that the measures indicated in your statement constitute a serious threat to peace and to the security of nations. The United States has openly taken the path of grossly violating the United Nations Charter, the path of violating international norms of freedom of ~~navigation on the high seas, the path of aggressive actions both against~~ Cuba and against the Soviet Union.

The statement by the Government of the United States of America can only be regarded as undisguised interference in the internal affairs of the Republic of Cuba, the Soviet Union and other states. The United Nations Charter and international norms give no right to any state to institute in international waters the inspection of vessels bound for the shores of the Republic of Cuba.

And naturally, neither can we recognize the right of the United States to establish control over armaments which are necessary for the Republic of Cuba to strengthen its defense capability.

We reaffirm that the armaments which are in Cuba, regardless of the classification to which they may belong, are intended solely for defensive purposes in order to secure the Republic of Cuba against the attack of an aggressor.

I hope that the United States Government will display wisdom and renounce the actions pursued by you, which may lead to catastrophic consequences for world peace.

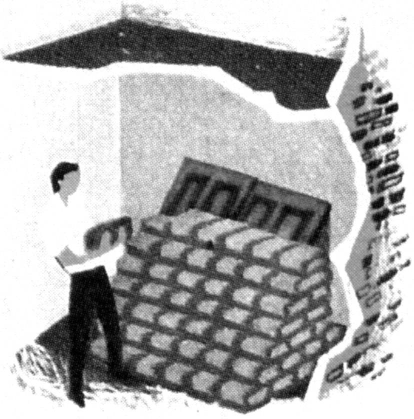
The viewpoint of the Soviet Government with regard to your statement of October 22 is set forth in a Statement of the Soviet Government, which is being transmitted to you through your Ambassador at Moscow.

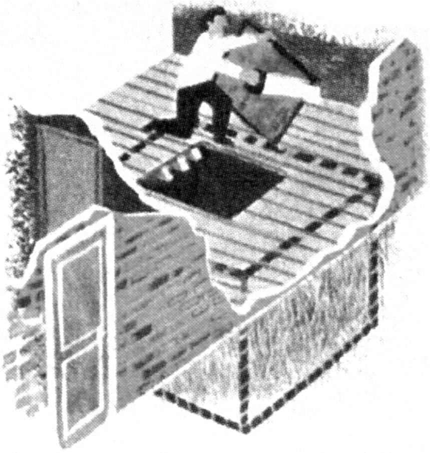
[s] N. Khrushchev

N. Khrushchev

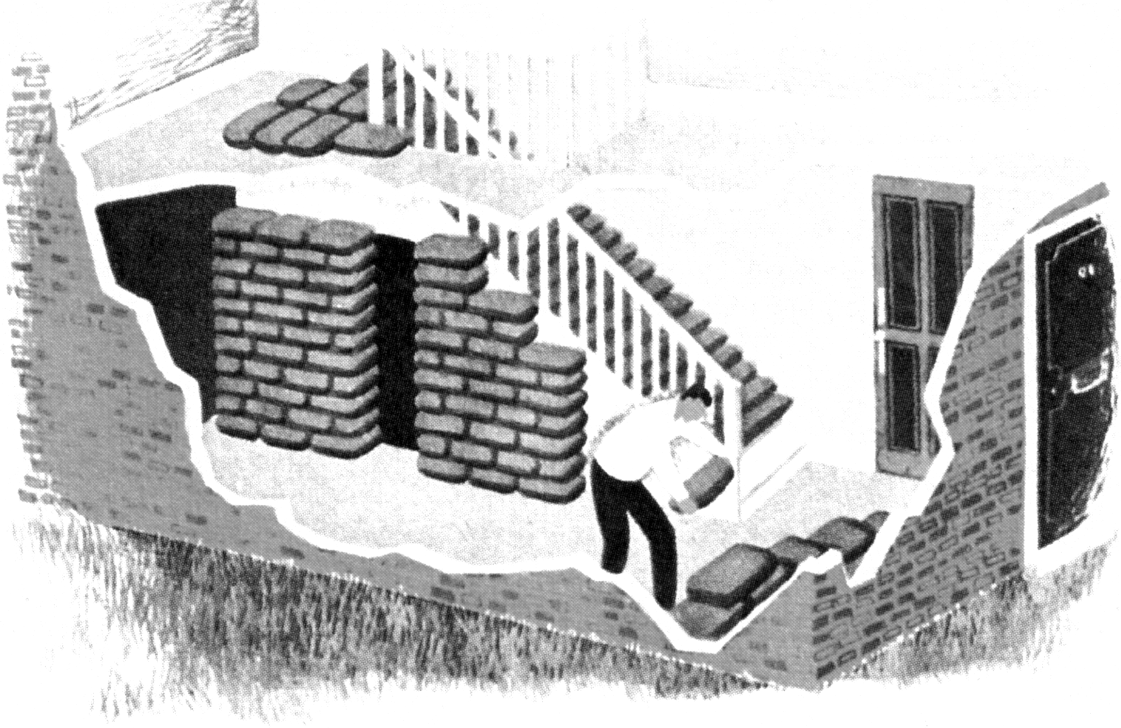
CIVIL DEFENCE HANDBOOK No. 10

UK, 1963



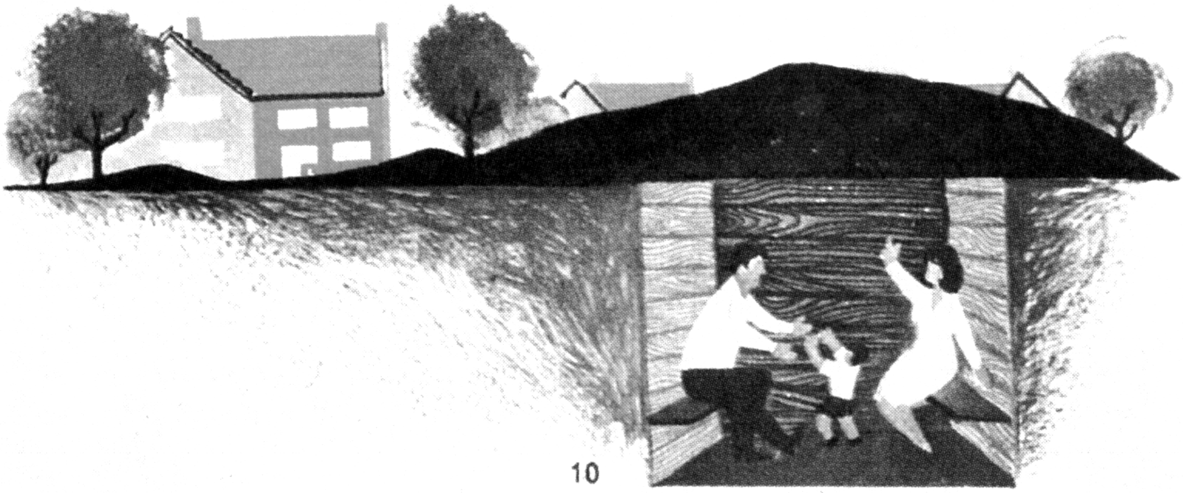


SHELTER "CORES"



Outdoor Fall-out Shelter

If it is impossible for you to prepare an indoor fall-out shelter, a trench dug outside your home would provide good protection. It should be deep enough to provide comfortable standing room and the sides should be shored up. After placing supports across the trench, cover the top with boards, metal sheets or concrete slabs, and heap earth on top. Leave a manhole-type entrance with a movable cover such as a dustbin lid. Keep a small ladder or a pair of household steps there.



MILITARY ASPECTS AND IMPLICATIONS OF NUCLEAR TEST BAN PROPOSALS AND RELATED MATTERS

HEARINGS

BEFORE THE

PREPAREDNESS INVESTIGATING SUBCOMMITTEE

OF THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

EIGHTY-EIGHTH CONGRESS

FIRST SESSION

PART 1

MAY 7, 15, 28; JUNE 5, 25, 26, 27; AUGUST 1, 2, AND 9, 1963

Printed for the use of the Committee on Armed Services

U.S. GOVERNMENT PRINTING OFFICE
27-733 WASHINGTON : 1964

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402 - Price $1.50

Yesterday, as you know, we had Admiral Anderson before us. He presented the statement that represents the joint views of the members of the Joint Chiefs.

I nevertheless think that it is important for you to testify personally in addition thereto.

You refer to the views expressed in the joint statement, and you conçurred in that statement, is that right?

TESTIMONY OF GEN. CURTIS E. LeMAY, CHIEF OF STAFF, U.S. AIR FORCE; COL. OLA P. THORNE, ASSISTANT FOR NUCLEAR ENERGY TO THE DEPUTY CHIEF OF STAFF, RESEARCH AND DEVELOPMENT, U.S. AIR FORCE; FRANK H. PEREZ, CONSULTANT ON ATOMIC ENERGY MATTERS TO THE ASSISTANT CHIEF OF STAFF, INTELLIGENCE, U.S. AIR FORCE, ALSO AIR FORCE MEMBER OF THE JOINT ATOMIC ENERGY INTELLIGENCE COMMITTEE; AND LT. COL. CHESTER A. SKELTON, ARMS POLICY BRANCH, DEPUTY CHIEF OF STAFF, PLANS AND OPERATIONS, U.S. AIR FORCE

General LEMAY. Yes, sir; that is right.

Senator STENNIS. You have filed a very strong supplementary statement. I believe it will expedite the matter if we can let the general read his statement now and read it in its entirety. Then we can ask questions.

All right, General, will you proceed in your own way?

LE MAY STATEMENT

General LEMAY. Mr. Chairman and members of the committee, the views of the members of the Joint Chiefs of Staff on a proposed nuclear test ban treaty were presented by Admiral Anderson on June 26, 1963. The agreed joint statement was submitted for the record.

I shall not elaborate further on the views presented in the agreed statement. However, I should like to repeat for emphasis that it is the judgment of the Joint Chiefs of Staff that the proposed test ban treaty is not adequate to prevent the Soviet Union from making important advances in nuclear weaponry [deleted]. We have concluded that the proposed treaty is not consistent with the national security.

At this time I should like the opportunity to discuss with you my views on the military implications of a nuclear test ban. [Deleted.]

If we expect to maintain military superiority, as the situation exists today, we must do two things: (1) continue to expand our understanding of weapon effects, and (2) continue to improve our military capabilities through the development and application of new weapon techniques. Nuclear testing is necessary for both of these objectives. To put it in another way: continuing, substantial progress in our nuclear technology is essential if we are to maintain the military capability necessary to support our overall foreign policy objectives. Testing is essential for such progress.

Some advance in nuclear technology can be made without testing, but the rate is unacceptably slow. This fact was brought home to us solidly by the 1958, self-imposed moratorium. We attempted to maintain our laboratories at a readiness-to-test capability; and we discovered how rapidly such a capability deteriorates if testing is not permitted. A standby program simply does not provide the challenge and incentives that are necessary to stimulate the rate of growth in nuclear technology that we must have if we are not to fall behind the Soviets. Without experiments and tests to prove new scientific theories or concepts, a competent scientist will not long consider that his efforts have much significance. New and younger scientists will not be attracted to nuclear research as a career. Opportunity to carry through the testing stage is an essential ingredient of a vigorous, fruitful nuclear research program.

It is quite apparent that the Soviet Union did not stop detailed planning and preparation for nuclear testing during the 1958 moratorium. The test series which they conducted during the period September 1961 through December 1962, was the most comprehensive in the history of nuclear testing. They demonstrated a very sophisticated nuclear weapon technology [deleted]. They also conducted very complex high-altitude-effects tests.

The sophistication of some of the Soviet tests leads us to believe that they may have a better understanding than we of the problem of defense against ICBM's, including effects of very high yield devices [deleted].

[Deleted.] We can also fairly conclude that the Soviets regarded testing as essential to the development of this knowledge. [Deleted.]

During the period September 1961 through December 1962, the Soviets detonated over 300 megatons [deleted]. During our recent test series we detonated approximately one-tenth of that megatonnage [deleted]. Ours were mostly in the low-yield range while the Soviets tested throughout the yield spectrum, from low-yield devices to the massive 60-megaton test conducted in October 1961. In the range above 1 megaton the Soviets had [deleted] tests in contrast to only [deleted] by the United States. Eight of the Soviet tests exceeded 10 megatons in yield, whereas the United States had only one test in the 10-megaton range. The importance the Soviets attach to testing for the development of their technology is dramatically illustrated by these statistics.

The free world philosophy of defense contemplates retaliation after nuclear attack. Consequently our strategy and our military posture demand confidence that our starategic forces can survive attack and still accomplish their mission despite possible enemy defenses. Today we have reasonable confidence, as opposed to assurance, that our missile systems will survive expected attacks in operating condition. [Deleted.] The "reasonable confidence" which I mentioned is the product, not of hard knowledge, but of deliberate overdesign. Overdesign is the only approach open to us in the absence of firm, reliable information on nuclear effects. [Deleted.]

We must know at what distance currently programed missile reentry vehicles, such as those for Minuteman and Polaris, would be destroyed by a defensive nuclear explosion. We need this information as a function of altitude and yield as well as other characteristics of the defensive weapon so that steps may be taken to reduce vulnerability and to improve aids and tactics for penetration.

We need effects data so that follow-on reentry systems can be designed to be as invulnerable as possible to interception and destruction.

Only after nuclear tests can we confidently proceed to develop hardening of our reentry vehicles and warheads, in order to decrease enemy warhead kill and assure penetration and survival of our reentry vehicles. We have a nuclear test project in planning from which we will be able to obtain reentry vehicle blast vulnerability data and other related effects. In addition to our limited knowledge of nuclear effects on reentry vehicles, we cannot guarantee the survivability of our missile launch complexes and communications links, again because of limited data which can best be obtained by atmospheric testing. [Deleted.]

We have a nuclear test project in planning which will provide information concerning effects on our ground environment to include hardened sites, communications equipment. [Deleted.] To carry out these projects we must be able to test in the atmosphere.

In the design of the Minuteman weapon system, it was necessary to push far beyond the frontiers of previous knowledge. The postulated conditions which this system must survive are far more extreme than those imposed on any earlier system. To assure, insofar as possible, that the design concepts were adequate, we employed recognized experts in all applicable fields. Those entrusted with guiding the design of the system have a high degree of confidence in its survivability, but this confidence is based upon deliberate and very costly overdesign, and should be verified by nuclear testing.

We have, of course, much information obtained from previous nuclear tests. [Deleted.] The results of some of the early high altitude tests made us aware of new and important effects, but provided virtually no quantitative data on which military planning could be based.

It is true that a portion of the information on high altitude nuclear effects can be obtained by a combination of theoretical calculations, simulation experiments, and underground nuclear tests. These sources provide valuable data and without them it would be necessary to have a very extensive program of high altitude nuclear tests in order to obtain the necessary information on missile vulnerability. But as useful as calculations and simulation techniques may be, they cannot give the complex information needed unless supported by at least a few high altitude nuclear tests carried out under realistic conditions.

[Deleted.]

As of now, the true hardness of our structures, communications equipment and other equipment to earth shock and electromagnetic pulse has not been determined with the desired degree of accuracy.

In addition to the requirement for reliable data on weapon effects, nuclear tests are required to perfect new concepts and to improve the yield-to-weight ratios for both clean and normal weapons. Clean weapons provide greater operational flexibility since they allow us to control radioactive fallout to a better degree than we can with normal nuclear weapons. Here again, additional testing is required to improve yield-to-weight ratios to a value comparable to that of normal weapons if unacceptable penalties and excessive overdesign are to be avoided.

[Deleted.]

The 1961–62 tests will permit the Soviets to stockpile a variety of very high yield weapons ranging from about 15 MP up to 100 megatons. [Deleted.]

As a matter of interest, the Air Force has only recently restated our military requirement for a high yield weapon and recommended that we proceed immediately with the development of a high yield [deleted] bomb (50 to 100 megatons) to be compatible with the B–52 aircraft.

The AEC laboratories have estimated that a weapon yielding approximately 45 to 60 megatons [deleted] could be developed [deleted] without further testing. The B–52 can, without major modification, be made compatible with these bomb weights and sizes to give the United States the earliest capability with such a high yield weapon.

There is a military requirement for high yield weapons. [Deleted.] Limited numbers of very high yield weapons would contribute measurably to deterrence in a manner which the Soviets would understand and respect. Certainly psychological and political advantages would accrue from such a publicized capability.

We are faced with the incontrovertible fact that in recent years the Russian rate of progress in the development of high yield weapons, and in the conduct of comprehensive systems and effects tests, has substantially exceeded ours. In fact, I have been informed that we have probably lost technological superiority in the very high yield class of weapons and possibly in the intermediate multimegaton class as well. It is more difficult to judge relative technology in the low yield range at this time.

While it is difficult to obtain specific information regarding Soviet knowledge of weapon effects, we can assume, from their comprehensive systems and effects testing, that they may well possess equal, if not a better understanding of our system vulnerabilities than we do.

If we continue to delay atmospheric nuclear testing we will substantially aid the Soviets. The Soviets did not stop planning and preparation for testing during the 1958–61 moratorium, and, as a result, their returns from the 1961–62 tests were maximized and major benefits gained from a most comprehensive test series.

You may recall that it was some months following the Soviet resumption of atmospheric tests before the United States was ready to conduct a test program. Even then, our atmospheric testing was limited and constrained to a considerable degree.

Our weapons development testing continues to be hampered by the arbitrary limits being proposed which could place us in a position so far behind in nuclear technology that the United States might not be able to recover.

I recognize that there is real concern over nuclear testing because of fear of worldwide fallout. We all desire to hold to a minimum any ill effects which may result from radioactive fallout generated by nuclear testing in the atmosphere. I would like to point out that possible adverse biological effects from fallout may have been considerably exaggerated. For example, all tests conducted through December 1962 will result in a per capita 30-year dose of about 0.15 REM (roentgen equivalent mammal). This value is considerably less than the corresponding 30-year dose of 3.0 REM from naturally occurring sources during the same period.

At sea level, the radiation dose from cosmic radiation far exceeds that from fallout; at higher elevations (Denver, Colo., 5,000 feet), cosmic radiation contributes an even greater fraction of the total body dose.

Fear of the unknown is played up by cartoons, propaganda, half-truths and misinformation as to the effects of fallout. I do not wish to imply that fallout cannot be a hazard; however, with proper precautions, such as those taken by the AEC, the hazard is minimized. A good public information program could allay most of the present concern. It is clear that effects from fallout are far less dangerous to our people, and the people of the free world, than the risks of Russian predominance in the nuclear weapons field.

Unless we are willing to undertake our testing program enthusiastically, and to expend the necessary effort and resources to insure a positive U.S. superiority in all of the critical nuclear areas, the Soviets stand to gain a clear margin of nuclear superiority vis-a-vis the United States. In the current world environment, preserving peace means maintaining preponderant military power. To maintain a favorable balance of military power we must have nuclear superiority. To do this I firmly believe we must continue our nuclear weapon development programs and be able to conduct nuclear testing as required.

WHETHER TESTING IS NECESSARY TO MAINTAIN U.S. SUPERIORITY

Senator **Stennis**. General, may I ask a few questions now based on your supplemental statement?

In the first part of your statement you say, and I am paraphrasing, that testing is essential for progress; and testing is also necessary to maintain our military superiority.

Now my question is this: Is this still true even if Russia should, under agreement, actually stop testing?

Suppose there should be a treaty and it should be observed and Russia actually stopped testing. Would our position then become inferior? Would parity result or would your statement hold true if there should be agreement?

General **LeMay**. If both sides agreed to stop testing now, and the Russians abided by the agreement, they would certainly be ahead of us in the high-yield weapons. We are sure of that.

They are probably ahead of us in the [deleted] range. [Deleted.]

While there seems to be general agreement [deleted] that we are probably still ahead in the low-yield range, I am not so sure that we have enough information to support this view.

It seems to me that at the time the Soviets decided to go ahead with their very comprehensive test program, they probably planned to test across the spectrum. They may have concentrated on high-yield tests; however, I believe it is prudent to assume that they went clear across the spectrum of yields. [Deleted.]

Senator **Stennis**. So, regardless of the situation at the lower yields, you feel sure that from [deleted] upward they have a present superiority which, of course, they would maintain if all testing were stopped by both sides, is that correct?

General **LeMay**. I think that is correct; yes, sir.

which this testing has been done concurrently overseas and within the United States. The first events commenced and completed were underground tests. These consisted of, as you can see here, the Hard Hat event, the Danny Boy shot, and Operation Marshmallow.

In addition, the other four events which occurred at the Nevada test site—The Little Feller II shot—the Danny Boy test, which is a crater and ground shot experiment, the Small Boy test, which comprised a great number of projects which I will go into more detail a little later, and, finally, the Little Feller I shot [deleted].

I will attempt to provide a synopsis of the most significant results of these tests, in terms of the requirements we have previously stated.

The five shots that occurred in the Pacific in the effects area were all high altitude. We did one underwater test which was to evaluate underwater effects for the safe delivery or safe standoff distance for delivery systems in delivering nuclear weapons.

CONTINENTAL TESTS

Test	Purpose	Yield (kilotons)	Date
Underground:			
Hard Hat	Underground structures	5.9	Feb. 15, 1962
Danny Boy	Cratering	.43	Mar. 5, 1962
Marshmallow	[Deleted]	[Deleted]	June 28, 1962
Atmospheric:			
Little Feller II	[Deleted] effects	[Deleted]	July 7, 1962
Johnie Boy	Cratering	.5	July 11, 1962
Small Boy	[Deleted]	[Deleted]	July 14, 1962
Little Feller I	[Deleted] effects	[Deleted]	July 17, 1962

PACIFIC TESTS

High altitude:			
Star Fish	400 kilometer effects	1,450	July 9, 1962
Check Mate	[Deleted] effects	[Deleted]	Oct. 20, 1962
Blue Gill	[Deleted] effects	[Deleted]	Oct. 26, 1962
King Fish	[Deleted] effects	[Deleted]	Nov. 1, 1962
Tight Rope	[Deleted] effects	[Deleted]	Nov. 4, 1962
Underwater: Sword Fish	Underwater effects	13.5 CLASSIFIED IN 2015!	May 11, 1962

DEFINITION OF HIGH ALTITUDE

Senator SALTONSTALL. High altitude is about how high?

Colonel CLINTON. We usually think of high altitude being anything above the altitude normally associated with airplane flight, sir.

Most of our high-altitude shots have been from 20 kilometers on up. We have done some lower altitude shots that have been in the atmosphere, which we have done by balloons. We generally think of high-altitude tests as being those tests above manned aircraft.

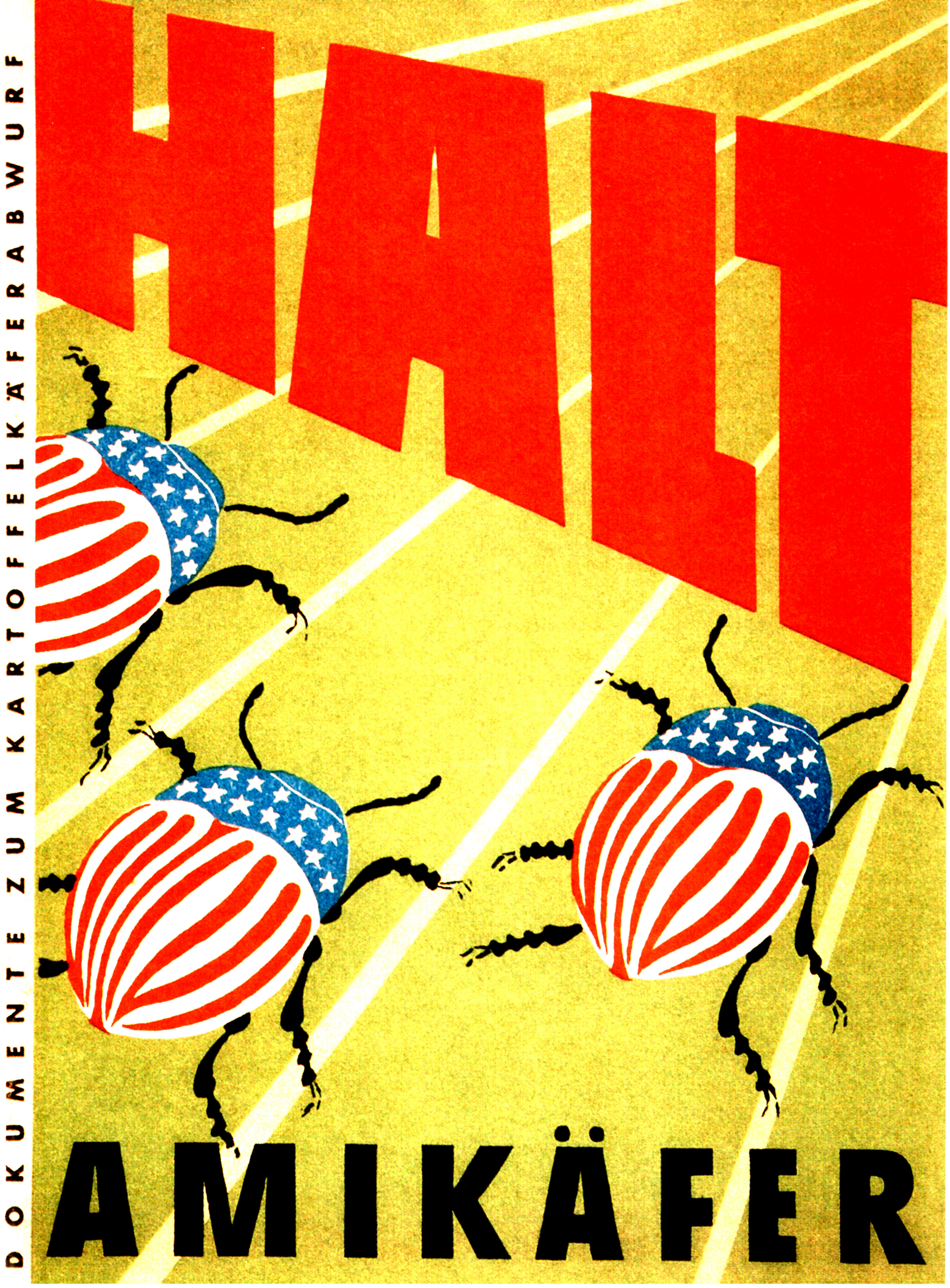
Senator THURMOND. What elevation is that, Colonel?

Colonel CLINTON. Fifty thousand feet, sir, on down. Normally I would say we would think of anything above 50,000 feet—I believe we would consider that a high-altitude shot.

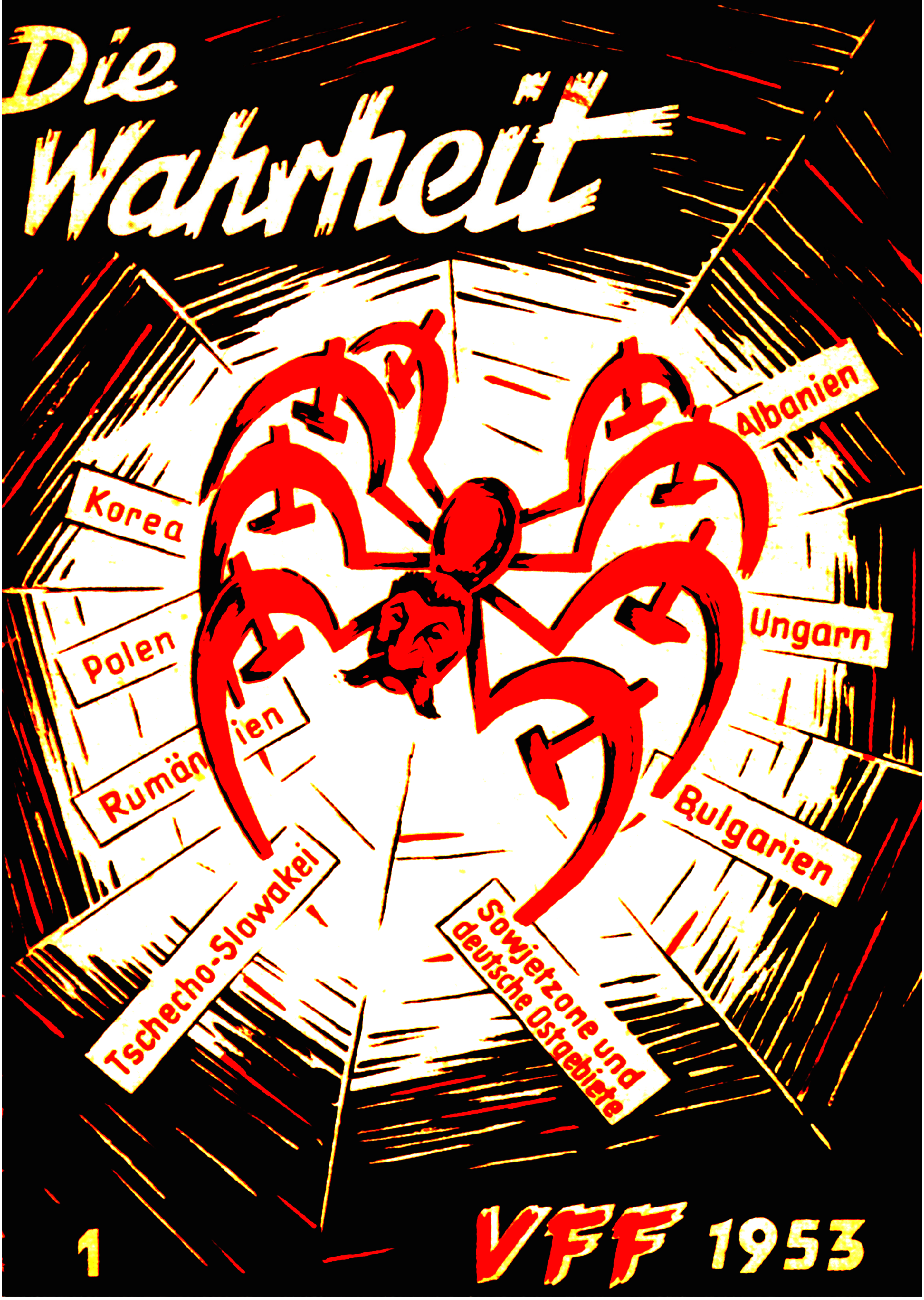
Senator STENNIS. All right, proceed.

Colonel CLINTON. I will attempt to discuss some of the results which we obtained from the tests in the last series.

The first of these is the vulnerability of hardened sites to both blast and shock effects [deleted]. These are the [deleted] major phenomena to which are hardened sites [deleted] are vulnerable. [Deleted]



YANKEE BEETLES: East German propaganda book uses natural beetle infestation as anti-American "bio war" propaganda, 1950. "Beetles normally appear in July, but now they appear in May."



THE TRUTH (DIE WAHRHEIT), issue 1, VFF (Volksbund fur Frieden), 1953. Depicts Stalin's web. Page 2: Anticommunists of all lands unite!